

Washington Fish and Wildlife Commission

Columbia River Harvest Reform Policy

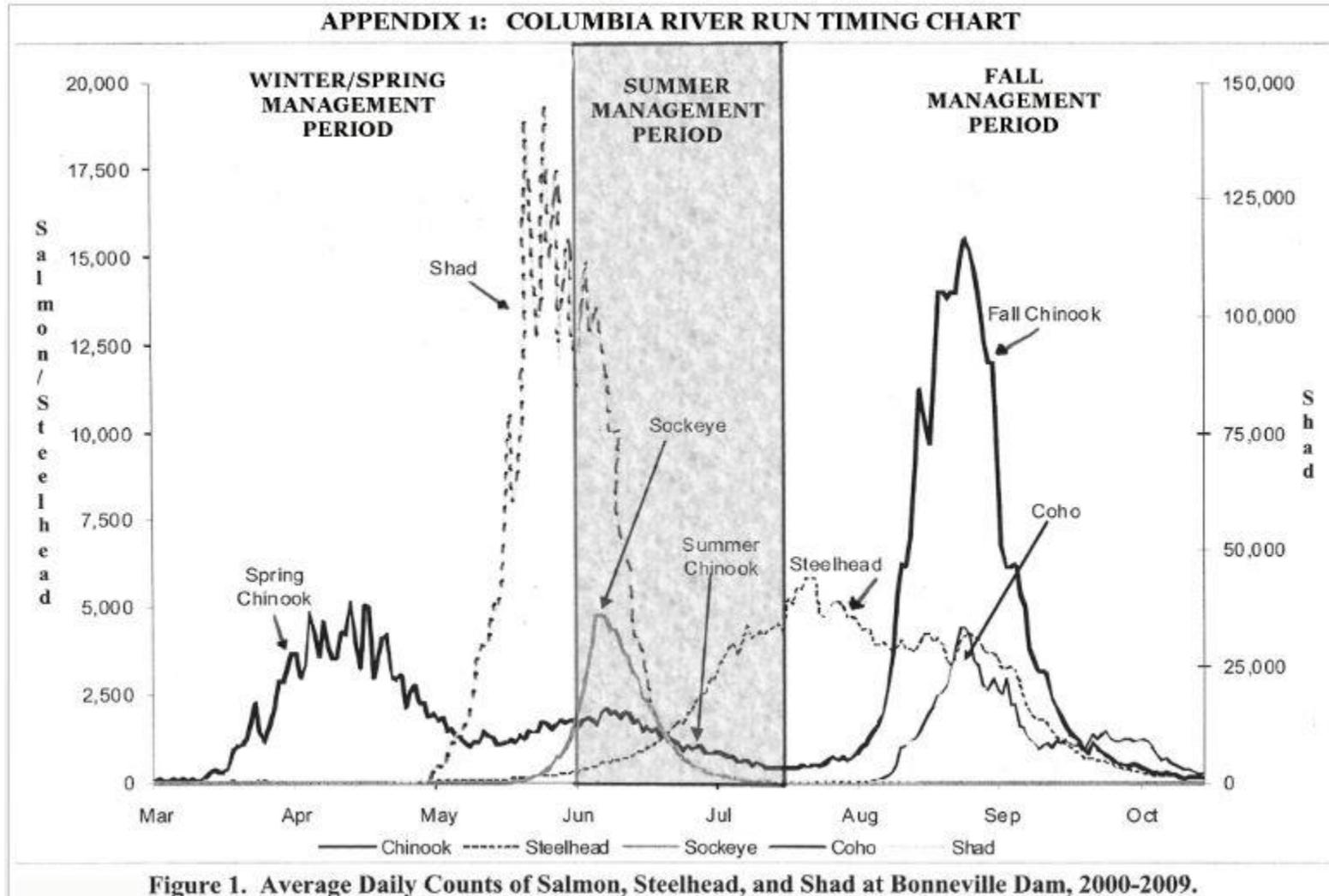
Columbia River Harvest Reforms

- Improved Conservation – Selective Fisheries
- Optimized Economics
 - Maintain commercial stability/economics
 - Enhanced off-channel gillnet harvests
 - Selective harvests – targeting hatchery fish within limited ESA-impacts
- Social Equity
 - Fishing opportunity
 - License revenue
- Mainstem Recreational Priority

Conservation – Selective Fisheries

- 13 ESA-listed salmonid stocks pass through the lower the lower Columbia River
 - Selective harvest critical
- Hatchery reform/litigation
 - Hatchery Genetic Mgmt Plans (HGMPs)
 - Mitchell Act – 55 hatcheries and 1/3 of CR hatchery production
- Concerns about bycatch
 - Steelhead, sturgeon....

What is Selective Harvest?



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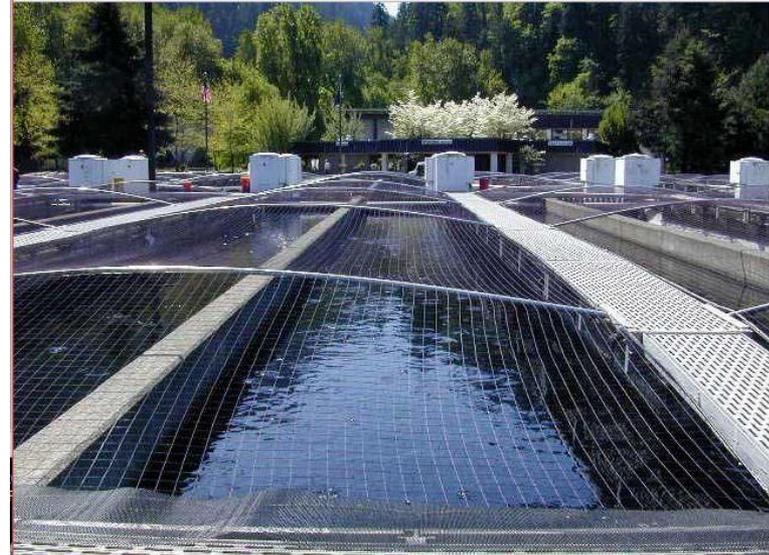
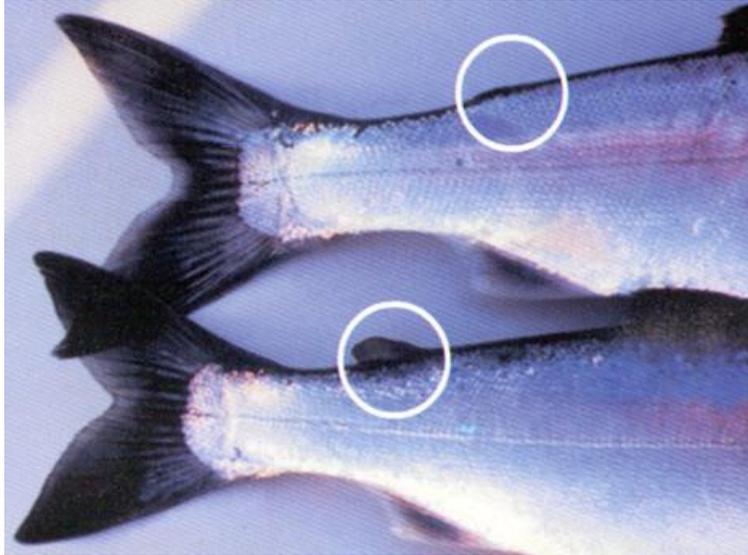


Table S-1. Total Hatchery-origin Salmon and Steelhead Production within the Columbia River Basin (X 1,000).

Recovery Domain	Fall Chinook Salmon	Spring Chinook Salmon	Summer Chinook Salmon	Coho Salmon	Winter Steelhead	Summer Steelhead	Chum Salmon	Sockeye Salmon	Total
Willamette / Lower Columbia	45,855	13,595	0	15,441	2,011	2,049	250	0	79,201
Interior Columbia	23,129	19,303	3,742	4,299	20	10,537	0	362	61,392
Total	68,984	32,898	3,742	19,740	2,031	12,586	250	362	140,593

Selective Harvest?



What is selective harvest?



Selective Harvest

- Spring Chinook (ESA-listed)
 - 2% non-treaty impact limit on wild Chinook
 - Release mortalities – sport 10%, tanglenet 14%
 - Bycatch species – winter steelhead, Sturgeon
 - Current 70/30 impact sharing, 80/20 in 2017
 - 2015 actual harvests: Commercial: 18,348 (6,460 in mainstem harvests; 11,888 in off-channel harvests) Lower River sport: 19,586

Selective Harvest

- Summer Chinook – not ESA listed
 - Other species – Steelhead (B-run ESA listed) and Sockeye (ESA-listed)
 - Wild escapement has fallen short 9 of the last 10 years.
 - Too many hatchery fish on the spawning grounds
 - Fairness: Recreational fisheries are mark-selective
 - Observer data from 2010 – discarded bycatch equal to the landed harvest.

Selective Harvest

- Fall Chinook
 - Tules (ESA-listed)
 - Generally below the Lewis River (Zones 1-3)
 - Selective harvest critical to reduce wild impacts and harvest surplus hatchery fish
 - Upriver Brights (not ESA-listed – strong returns)
 - Current fisheries largely non-selective (Zones 4-5)
 - Snake River Wild (ESA-listed)

Commercial Economics

- Table C.4 and C.5 - \$3.6 million economic baseline (later revised to \$3.86 million).

Table 20. Ex-vessel value of Chinook and Coho salmon in lower Columbia River commercial fisheries, 2012 – 2015.

	2012	2013	2014	2015
Mainstem	\$2,043,762	\$3,285,674	\$3,693,268 ^a	\$3,472,107 ^b
Select Area	\$1,303,897	\$2,096,146	\$2,474,179	\$1,589,991
Total	\$3,347,659	\$5,381,820	\$6,167,447	\$5,062,098

^a Value of pilot 2014 research seine fishery not included in mainstem commercial fishery total because ESA impacts (research) for the fishery were not part of the commercial sub-allocation.

^b Value of 2015 commercial seine fishery included because ESA impacts for the fishery were included in the commercial sub-allocation.

Commercial Economics

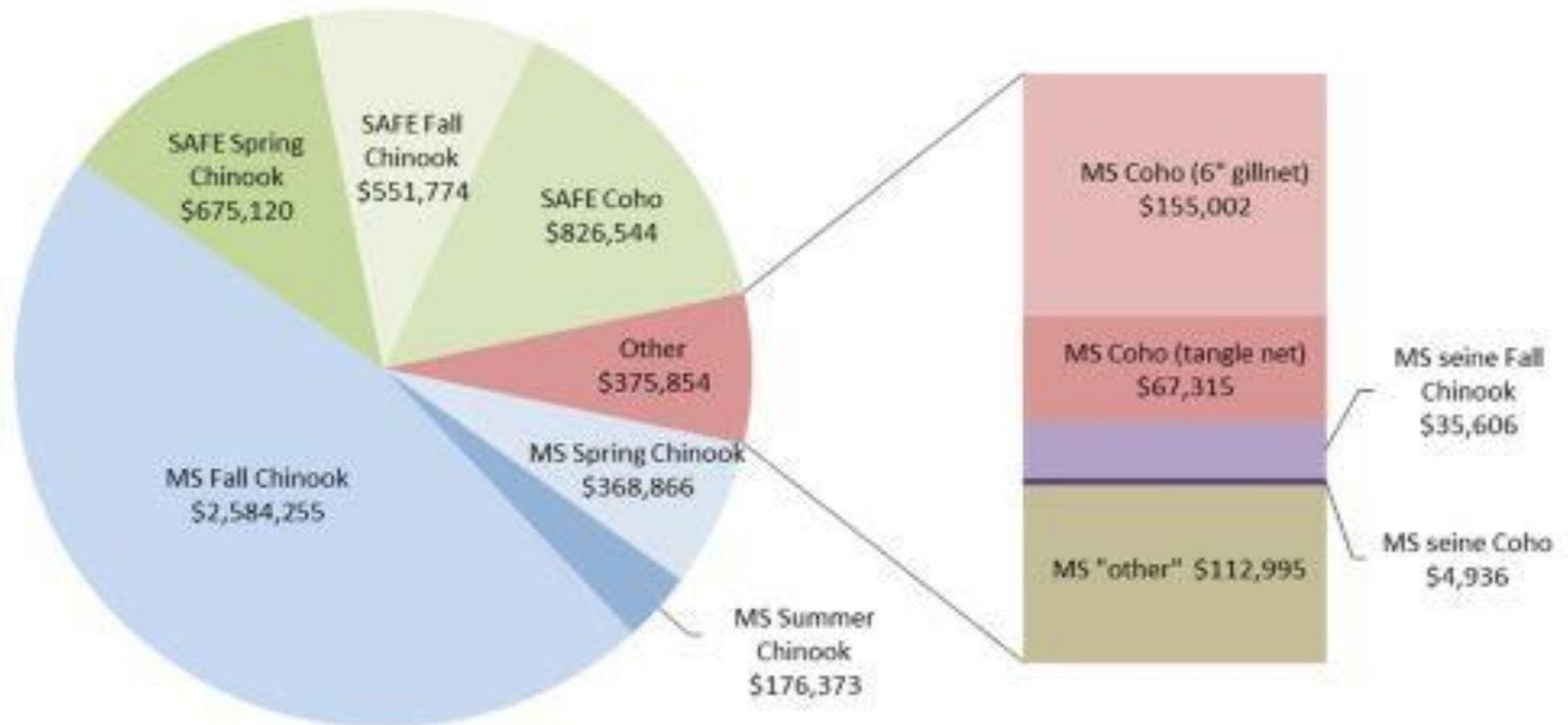
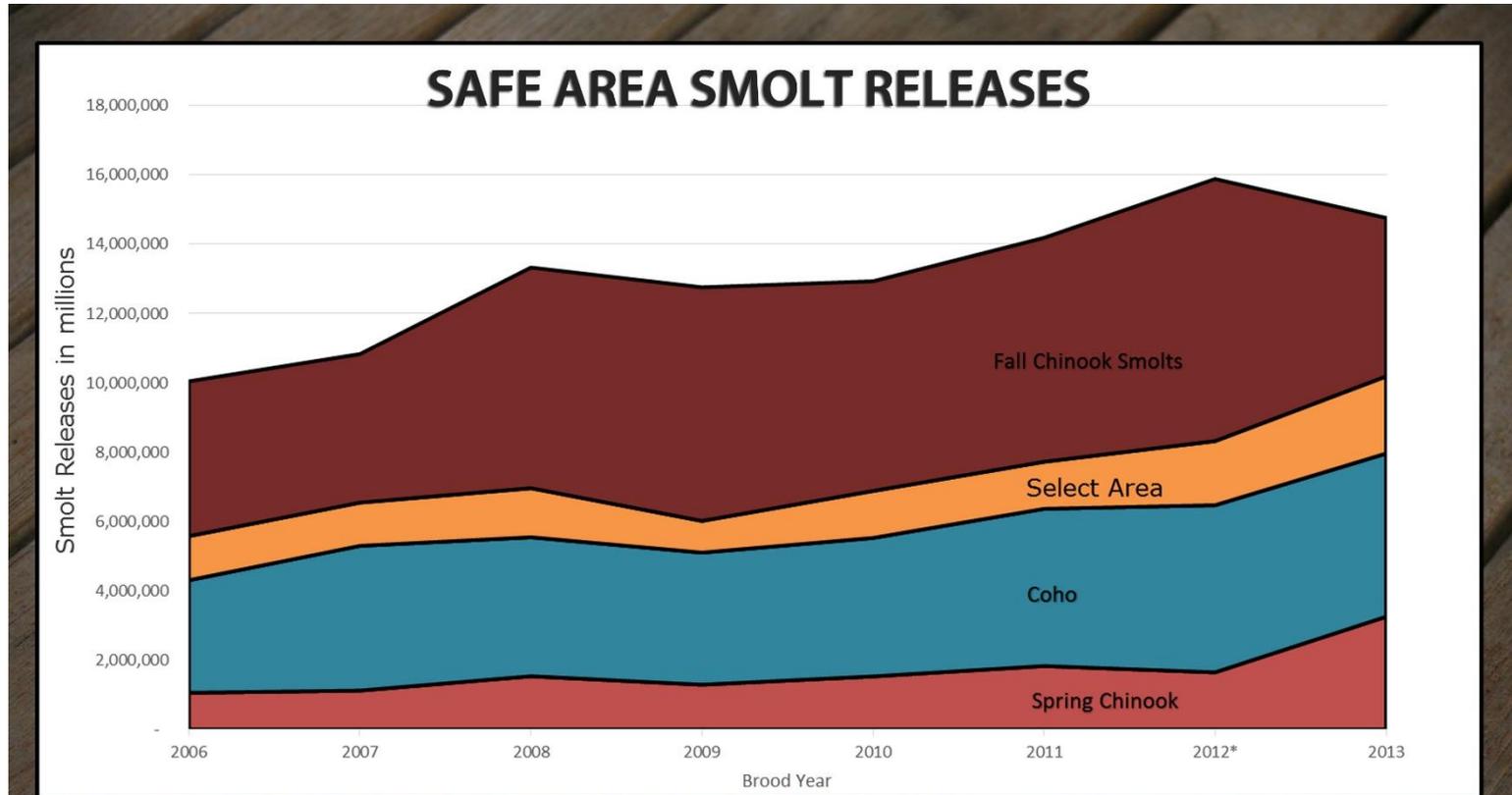


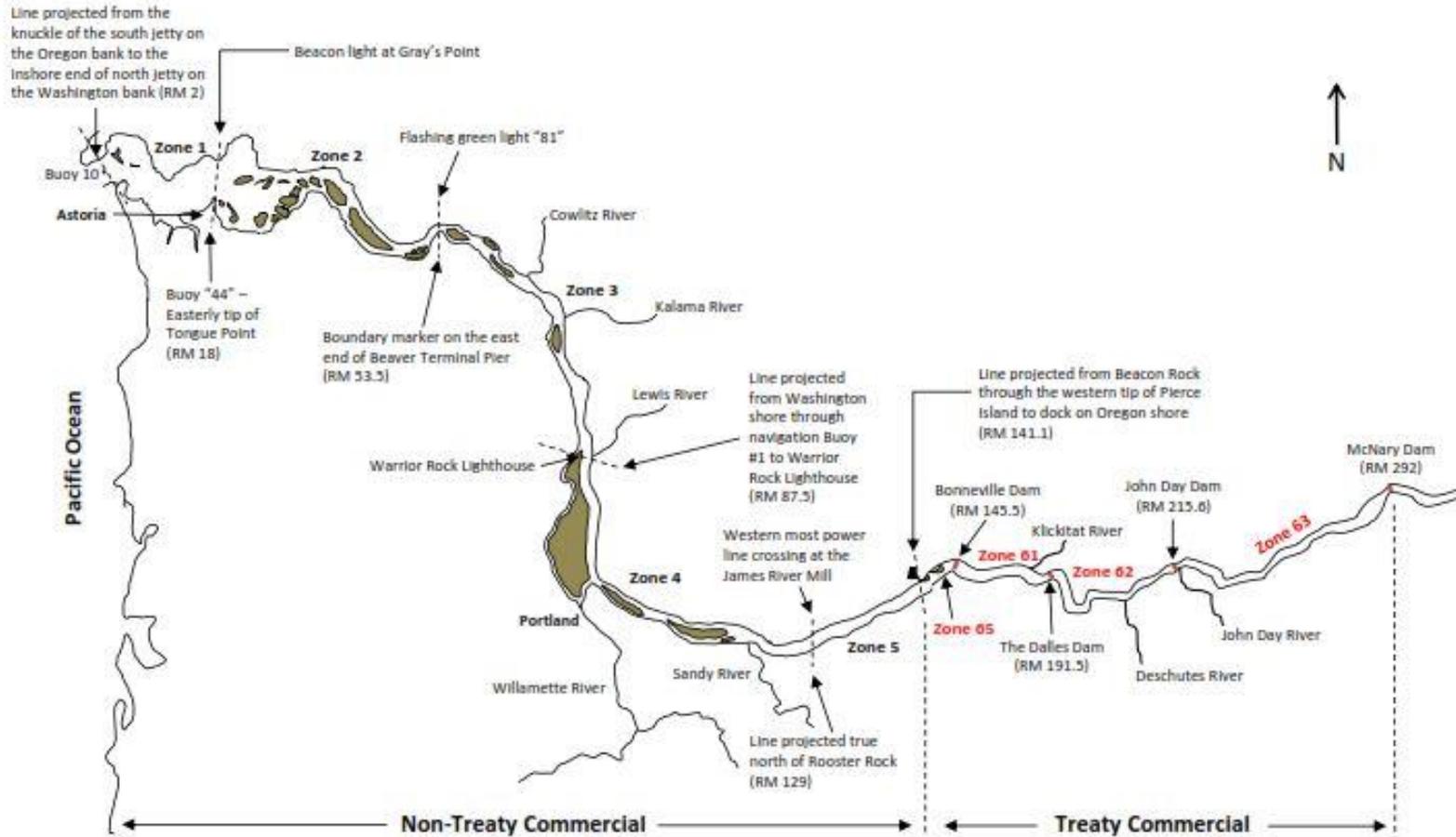
Figure 5. Average ex-vessel value of non-Indian mainstem (MS) and Select Area (SAFE) commercial salmon fisheries in the lower Columbia River, 2013-15.

Commercial Economics



Source ODFW, WDFW. Note: Brood Year reflects the year in which eggs were taken. ChS and CO are reared for 2 years before release; SAB and ChF, 1 year.

Fall Gillnet Fishery



Commercial Fishing Zones on the Columbia River Below McNary Dam

Selective Gear Testing (2009-2011)



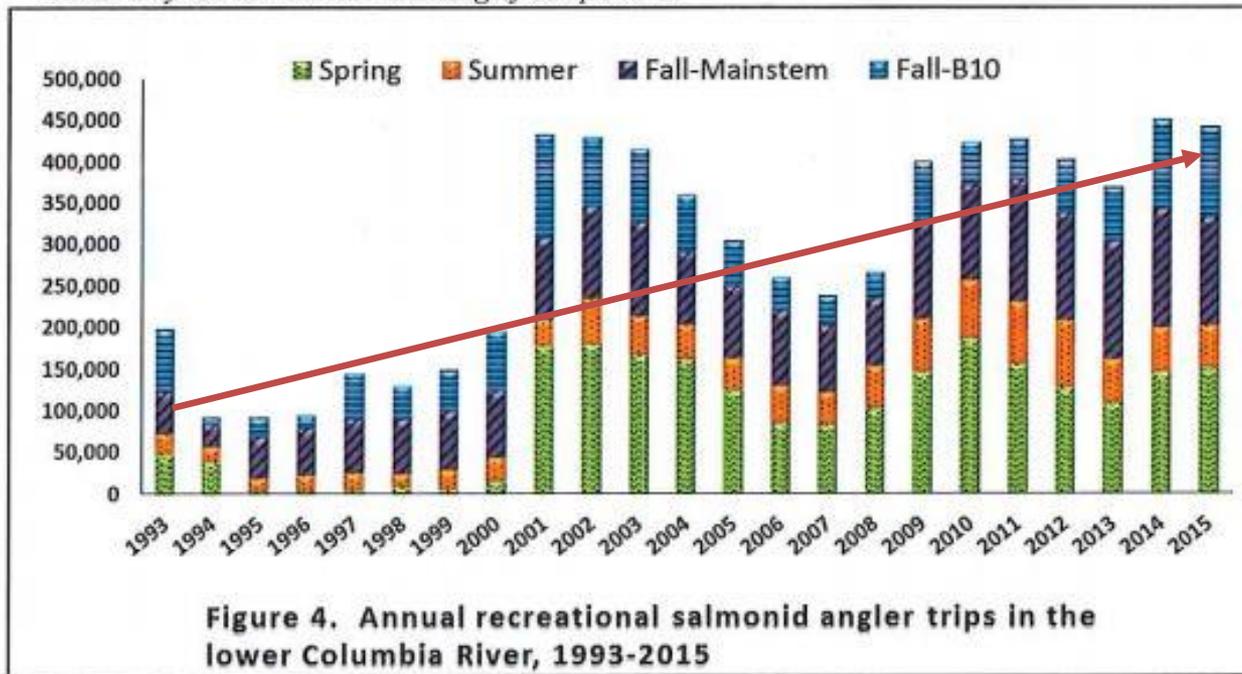
- (2011): Purse Seine – 17,334 total catch/23 mortalities; Beach Seine – 12,054 total catch/6 mortalities. Grand total – 29,388 total catch / 29 mortalities – Observed Mortality Rate of 1/10th of 1% Steelhead – 2,892 handled/1 mortality.
- **Coho Tanglenet Fishery – VERY Different approach**
- (2014): US v. OR Technical Advisory Committee (TAC) adopts nonsensical release mortality rates for purse seines: Chinook: 22.5%; Coho: 28.9%; Steelhead: 3.3%

Optimizing Economics - Recreational

Table 17. Recreational salmonid angler trips downstream of Bonneville Dam, 2012 – 2015.

	Angler Trips			
	2012	2013	2014	2015
Spring	127,900	109,700	145,600	151,200
Summer	80,700	52,000	53,700	50,600
Fall – B10	65,100	65,800	107,500	108,300
Fall - mainstem	128,800	141,500	143,900	131,400
Total ^a	402,600	368,900	450,800	441,400

^a Totals may not sum due to rounding of components.



- 2014 & 2015 – >\$28 million in economic value – lower river only. (\$63.91/angler trip) – WDFW mult).

Optimizing Economics

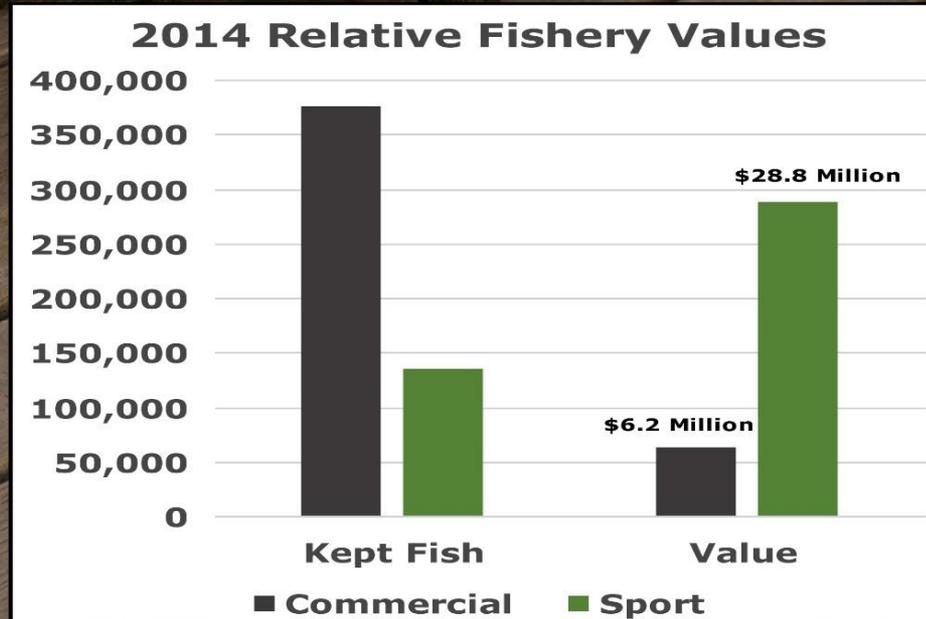
2014 RELATIVE FISHERY VALUES

COMMERCIAL

\$16.57-Average landing Value

SPORT

\$214.78-Expenditure per fish



Source: ODFW, WDFW-Angler trips and harvest; ODFW landings values; WDFW angler trip expenditures. Ave. Expenditure per sport-caught fish: \$214.78. Trip expenditures do not include durable goods such as boat, trailers, electronics, rods, reels, etc. \$16.57 Average landing Value for Commercial fish.

- **Commercial multiplier *2.24 (WDFW) = \$37.12**
- Source: WDFW Freshwater Impact per trip. Trip Expenditures do not include durable goods, such as boats, trailers, electronics, rods, reels, etc.

WDFW Revenue - Funding Management and Conservation

Columbia River Sport

- 216,238 anglers purchased CRSSE in 2015 (\$8.75 annual) = \$1,594,191*
- License revenue from 216,238 anglers in 2015 = \$6,709,032*
- Dingell Johnson Federal Excise Tax (est.) = \$2,000,000+

\$10,303,226

Columbia River Commercial

- Food fish excise tax (DOR) - 2015 = \$81,692.00
- Gillnet license revenue (2015) - \$150,000 (est) – split with WB/GH

\$231,692.00

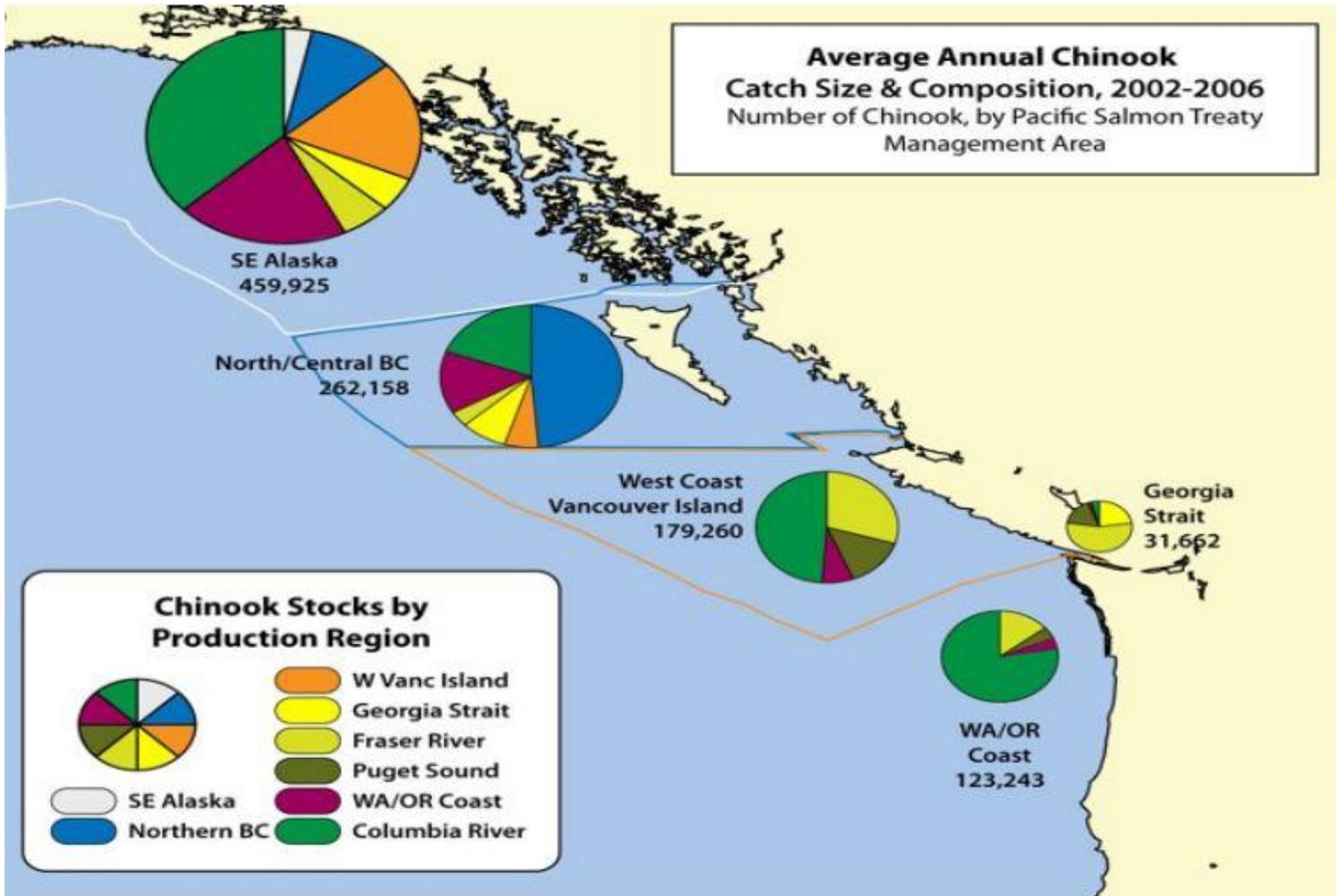
*Source: WDFW

Equity

Washington Columbia River Gillnet Permit Landings

<u>Annual Ex Vsl Value</u>	<u>Number of Licenses</u>					<u>Average #</u>	<u>%</u>
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>		
\$1 - \$4,999	30	31	38	44	48	38.2	39.96%
\$5,000 - \$10,000	22	17	27	18	32	23.2	24.27%
\$10,00 - 15,000	14	10	21	22	13	16	16.74%
\$15,000 - \$20,000	5	9	8	13	10	9	9.41%
Over \$20,000	0	16	9	12	9	9.2	9.62%
<u>Total all categories</u>	<u>71</u>	<u>83</u>	<u>103</u>	<u>109</u>	<u>112</u>	<u>95.6</u>	

Social Equity



Equity

Economy

Alaska commercial fishermen shatter all-time salmon harvest record

Cordova Times | September 24, 2013

2015 Alaska Salmon Harvest Projection

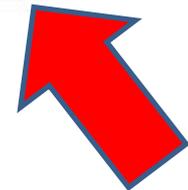
thousands of fish

	Chinook	Sockeye	Coho	Pink	Keta	Total	10-yr Avg. Harvest
Southeast Region Total	N/A	1,111	2,918	58,000	9,265	71,294	
Prince William Sound	9	4,548	434	51,415	2,902	59,308	
Cook Inlet	7	4,189	162	1825	238	6,421	
Bristol Bay	0	40,520	133	1	751	41,405	
Central Region Total	16	49,257	820	53,241	3,891	65,611	
Kodiak Area	22	3,632	281	14,300	711	18,946	
Chignik	7	1,588	87	551	246	2,479	
South Peninsula & Aleutians	7	1,774	199	14,019	767	16,766	
North Peninsula	1	1,322	51	106	219	1,699	
Westward Region Total	38	8,316	618	28,976	1,944	39,893	
AYK Region Total	1	90	315	50	2,115	2,571	
Statewide Total	N/A	58,773	4,580	140,268	17,216	220,837	
5-yr Avg harvest	389	38,017	4,420	121,177	17,043	181,045	
10-yr Avg harvest	460	40,500	4,360	116,411	17,203	178,933	

Source: Alaska Department of Fish and Game

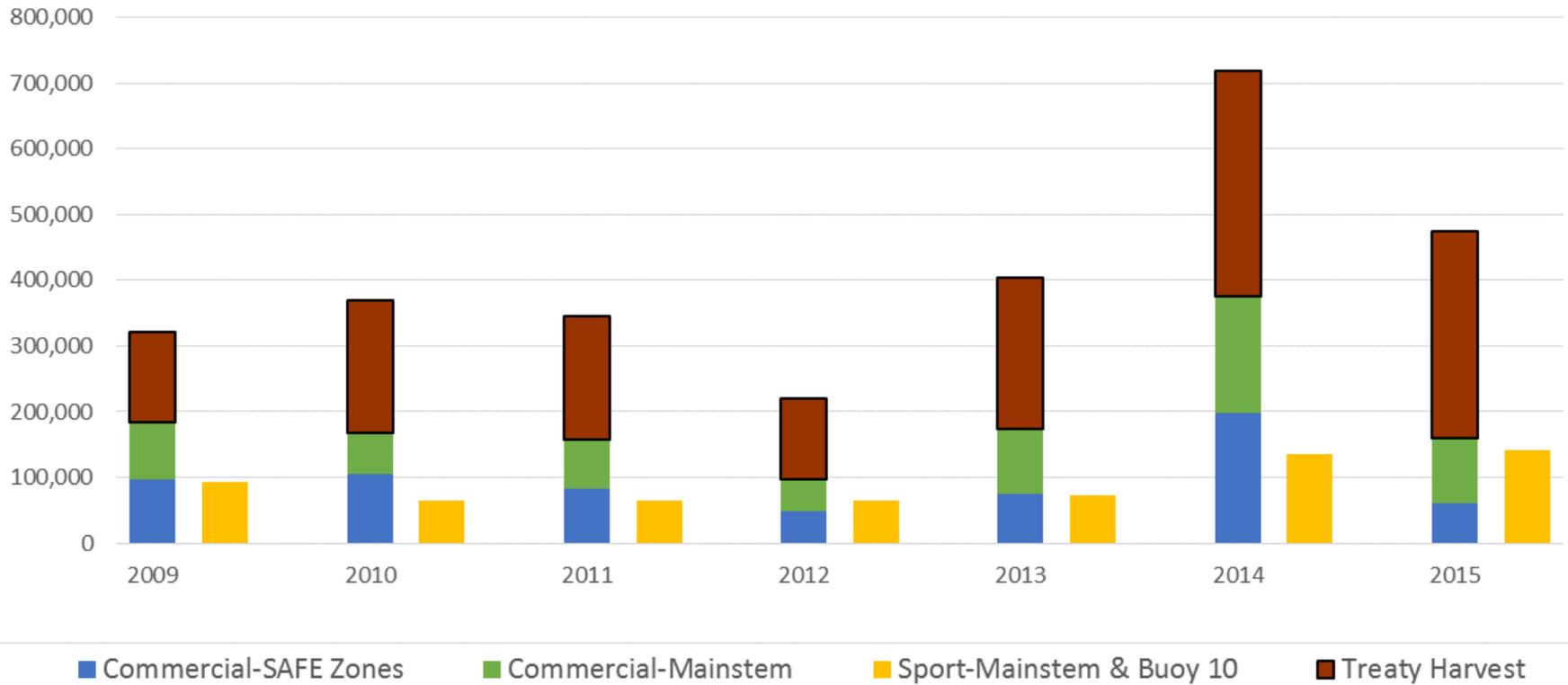
Totals may not match due to rounding

* SE Region forecast not yet available.



Equity

Columbia River Sport, Tribal and Non Tribal Commercial Harvest



Key Issues and Recommendations

- Conduct new tests or adjust mortality rates for seine fisheries
- Selective fisheries critical – particularly during the fall (maintain Tule production)
 - Continue pushing forward on seines, gillnets not a long term solution for mainstem fisheries
- Gillnet buybacks and fleet reduction
- Monitoring of Zones 4-5 gillnet fishery (steelhead, sturgeon, etc) – address
- VSI fisheries in Zones 1-3

Key Issues and Recommendations

- Remember the original purposes of the policy
 - Conservation / selective fisheries
 - Optimize the economics
 - Mainstem Recreational priority
 - Off-channel gillnet fisheries
 - Maintain commercial economics - \$3.86 million ex-vessel value
- Remember the Columbia River doesn't stop at Bonneville!
- Implement the policy as written for 2017
- Make a policy determination regarding summer Chinook
- Lead and be bold – the public and legislators are behind you